KEEGAN WERLIN LLP

ATTORNEYS AT LAW
265 FRANKLIN STREET
BOSTON, MASSACHUSETTS 02110-3113

TELECOPIERS:

(617) 951-1354

(617) 951-0586

(617) 951-1400

June 13, 2005

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station, 2nd Floor Boston, MA 02110

RE: D.T.E. 04-116- Investigation by the Department of Telecommunications and Energy On Its Own Motion Regarding the Service Quality Guidelines Established in Service Quality Standards for Electric Distribution Companies and Local Gas Distribution Companies, D.T.E. 99-84 (2001)

Dear Secretary Cottrell:

Please find attached the responses of Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company, d/b/a NSTAR Electric and NSTAR Gas Company (together with NSTAR Electric, "NSTAR") to the Department of Telecommunications and Energy's First Set of Discovery to NSTAR Electric in the above-referenced proceeding.

Please contact me, Cheryl Kimball or Kerry Britland at NSTAR if you have any questions regarding the filing.

Very truly yours,
Im K. Habrb

John K. Habib

Enclosure

cc:

Service List

Jody Stiefel

Joseph Rogers, Assistant Attorney General

cations and Energy D.T.E. 04-116

Information Request: DTE-NSTAR 1-1

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 1

Information Request DTE-NSTAR 1-1

Refer to NSTAR's Reply Comments at 30. NSTAR states that the IEEE Standard 1366-2003 is designed to exclude outages based on their relative severity for the particular utility system without regard to the factors causing the outrage. Please explain whether, and if so, how, one of three Department's existing SQ Guidelines criteria (i.e., any other event that causes an unplanned interruption of service to 15 percent or more of the electric company's customers) distinguishes the major events based on the factors causing the outage.

Response

Under the current Department SQ Guidelines, an Excludable Major Event is a major outage event that meets one of three criteria: (1) an event caused by earthquake, fire, or storm of sufficient intensity to give rise to a "state of emergency" as proclaimed by the Governor; (2) any other event that causes an unplanned interruption of service to 15 percent or more of the electric company's customers; and (3) an event that results from a disturbance of a transmission, power supply or other system not owned or operated by the electric utility (SQ Guidelines at I.B).

Item (2) allows for the exclusion of unplanned outages affecting 15 percent or more of customers within the service territory, regardless of whether the specific factors causing the outage are within the control of the Company. However, in the Company's experience, the majority of events excluded under Item (2) result from severe weather events outside of the control of the management. For example, over the past five years, a total of 23 excludable events have occurred on the NSTAR Electric system with 19, or 83 percent, occurring as a result of factors outside the Company's control.

NSTAR Electric

Department of Telecommunications and Energy

D.T.E. 04-116

Information Request: DTE-NSTAR 1-2

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 3

Information Request DTE-NSTAR 1-2

Please explain what the Company means by "objective criteria that is consistently applied across utilities" as stated on page 31 of the Reply Comments. In particular, explain whether and, if so, why, the IEEE Standard 1366-2003 criteria are not objective and are not consistent across utilities. Does the Company believe that in order to be consistent across utilities, the threshold of exclusion should be identical and invariable across all utilities regardless of their size, geography, and topography?

Response

The SAIDI/SAIFI performance measures are "reliability statistics" intended to provide an indication of the customer's service experience by measuring the duration and frequency of outages occurring on a given utility system. Thus, the first and most basic step in the SAIDI/SAIFI calculation is to tabulate the total number of outage minutes, the total number of outages and the total number of customers affected over the 12-month measurement period. These totals represent the "raw data" establishing the utility's level of service reliability as measured by SAIDI/SAIFI.

However, the Department's SQ rules allow certain adjustments to the raw data to account for the exclusion of certain types of outages not resulting from service-These exclusions include: reliability problems. (1) Excludable Major Events; (2) planned outages; (3) non-primary distribution circuit outages, i.e., a single customer outage or a single secondary line transformer outage; (4) momentary outages, i.e., outages of less than one minute in duration; (5) restoration outages, i.e., outages caused by the need to perform switching in the course of restoring service; and (6) customer equipment outages. See, SQ Guidelines at Section V. The designation of these outage categories as "excludable," represents a policy determination by the Department that these types of outages do not provide an indication of the reliability of the system. As a result, these types of outages are deemed by the Department to be appropriate for exclusion from the total number of outages and the total duration of outages. Thus, the total of number of outage minutes, the total number of outages and the total number of customers affected, net of the excluded outages, is used to calculate the SAIDI/SAIFI indices.

From a policy perspective, the designation of the types of outages that do not indicate service reliability problems, and therefore, are appropriate for exclusion from the actual operating totals *should be the same* for all electric companies. For example, if the Department has determined that outages initiated by the Company in the course of restoring service should be excluded from the SAIDI/SAIFI calculations because those

D.T.E. 04-116

Information Request: DTE-NSTAR 1-2

June 13, 2005

Person Responsible: Susan McSherry

Page 2 of 3

outages do not result from a lack of reliability in the system, then that policy should be applied consistently across all utilities. In addition, these *exclusion criteria* are objective in that there is no judgment needed to determine whether an outage occurs on a primary distribution circuit (included) or secondary distribution circuit (excluded). Accordingly, by establishing and applying these objective exclusion criteria, the Department has achieved a level of standardization in the SAIDI/SAIFI calculation across utilities within its jurisdiction.

The Department's definition of "Excludable Major Event" allows the exclusion of outage events affecting 15 percent or more of customers within the service territory. Again, this represents a policy determination that large-scale outages, regardless of the cause, should be excluded from a company's SAIDI/SAIFI statistics because inclusion of those relatively large and infrequent outages would distort an evaluation of the actual "reliability" of the utility system, especially where caused by factors outside of the utility's control. The use of a threshold based on a percentage of customers, i.e., 15 percent of customers, establishes a proportional or "sliding scale" standard that can be objectively applied on a consistent basis across utilities, while accounting for the size differences between companies.

The Company is not asserting that, "in order to be consistent across utilities, the threshold of exclusion should be identical and invariable across all utilities regardless of their size, geography, and topography." However, the Company believes that it is important that the Department establish consistent *policies* regarding the appropriate categories of exclusions for all utilities. Specifically, the Department's designation of "excludable events" represents a policy decision to exclude certain types of outages from the total number and duration of outages recorded in a year.

The Company's concern with the IEEE 1366-2003 standard is that, rather than setting a consistent policy for all utilities in terms of the "magnitude" of outages eligible for exclusion (as defined by the number of customers affected), it explicitly works to set a unique threshold of exclusion for each system so that the magnitude of outages that would be excludable on one system are not excludable on another.

Moreover, the magnitude of the outage eligible for exclusion depends on the utility's choices regarding system investment and the way in which the utility operates its system over time, rather than being set by Department policy that objectively establishes excludable outages based solely on the number of customers affected as an indicator of significance. Thus, a second concern that NSTAR has with the IEEE 1366-2003 standard is that it would allow exclusion of major outages based on *duration*, rather than just the number of customers affected, as is the case under the Department's existing

Information Request: DTE-NSTAR 1-2

June 13, 2005

Person Responsible: Susan McSherry

Page 3 of 3

rules. To date, the Department has not adopted a policy of excluding outages because of their duration. Thus, adopting a formula to establish the exclusion threshold on a company-specific basis represents a move *away from* standardization rather than a move toward standardization. The IEEE 1366-2004 "standard" is consistent among utilities only in terms of the *formula* that is used to calculate the threshold. The resulting thresholds would be different for each system, which is not the case under the Department's existing system (i.e., 15 percent of customer base).

In fact, to be consistent with the Department's desire to standardize SAIDI/SAIFI measurement to the extent possible, the Department should be *eliminating* exclusions (such as single-customer outages), perhaps even to the point of allowing the 15 percent exclusion only when the outage occurs as a result of an event outside of the Company's control (which would constitute a policy that excludable events are not of the type that reflect on the system's reliability).

D.T.E. 04-116

Information Request: DTE-NSTAR 1-3

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 1

Information Request DTE-NSTAR 1-3

Does NSTAR agree that the Major Event day ("MED") methodology must be fair to all utilities regardless of size, geography, or design? If so, please explain whether, and if so, how, the IEEE Standard 1366-2003 methodology would affect the principle of fairness with regards to NSTAR? Also, please explain whether, and if so, in what specific way, the Department's existing SQ Guidelines are consistent with this principle.

Response

As an initial matter, the Department has an obligation to implement policies on a fair and equitable basis across all utilities subject to its jurisdiction. In that regard, the Department's existing SQ guidelines represent a coherent, reasonable and fair system for measuring service-quality. The Department's SQ system is constructed to measure a company's performance on critical activities directly affecting customers and establishes a fair and equitable mechanism for assessing penalties in the event that appropriate service levels are not maintained.

As discussed in detail in response to DTE-NSTAR 1-2, the challenge for the Department in this proceeding is to establish a policy on outage exclusions that will be applied on a consistent basis across utilities subject to its jurisdiction. In that regard, the "MED" methodology is not inherently "unfair" to one utility or another, nor is NSTAR Electric making such a claim. Rather, the use of the IEEE standard to designate "excludable events" would represent a policy decision to exclude a new category of outages from the total number and duration of outages recorded in a year. Thus, the Company's concern with the "MED Methodology" is that rather than setting a consistent policy for all utilities in terms of the magnitude (defined as the number of customers affected) of outages eligible for exclusion, it explicitly works to set a unique threshold of exclusion for each system so that the "magnitude" of outages would also be defined by duration, and therefore, would result in outages that are excludable on one system are not excludable on another.

In addition, the "MED" methodology would allow exclusion of major outages based on *duration*, rather than just the number of customers affected, as is the case under the Department's existing rules. The Company does not agree that moving toward a system that incorporates a *broader* basis for exclusion is consistent with the underlying objective of the SQ system, which is to measure the level of system reliability maintained by the Company by capturing outages in the SAIDI/SAIFI calculation.

D.T.E. 04-116

Information Request: DTE-NSTAR 1-4

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 2

Information Request DTE-NSTAR 1-4

Refer to NSTAR's Reply Comments at 31. The Company notes that the use of daily system average interruption duration index values in the calculation means that the designation of major events is a function of outage duration.

- (a) Does the Company believe that the IEEE Standard 1366-2003 method would create a disincentive for the utilities to expeditiously address the outages? If so, please explain how such a behavior would affect the "unusual" event designation threshold in the long run.
- (b) Does the Company believe the electric local distribution companies have no incentives outside of the SQ evaluation process to address the outages in a timely fashion? If not, please identify those incentives.

Response

(a) NSTAR Electric firmly believes that electric utilities are devoted customerservice organizations with the same general mindset to plan for and manage their systems in a way that will minimize the number and duration of outages experienced by customers. NSTAR Electric's comments on the IEEE methodology are aimed at the theoretical underpinnings of a system that does not appear (to NSTAR) to offer any improvement to the current system, and not to comment on the motives or incentives raised by a change in policy.

In the Company's reply comments, the Company noted that electric utility systems may be designed to operate at higher or lower levels depending upon the risk that the utility is willing to accept in terms of service outages and system disruptions. Under IEEE Std. 1366-2003, it is possible for a utility to experience one or more system events in a performance year resulting from limited system redundancy, or to experience outages with prolonged restoration times, and to have those outages excluded because the "normal operation" of the system does not require performance to the level necessary to sustain service.

With respect to the "long-term" implications of the proposed IEEE Std. 1366-2003, it should be noted that the exclusion threshold would change each year. Excluded events in one year are factored into the IEEE Std. 1366-2003 methodology in the next year, which has the effect of raising the threshold for excludable events in the next year. However, because the formula adjusts the threshold each year, a couple of years with fewer unusual events will lower the

Information Request: DTE-NSTAR 1-4

June 13, 2005

Person Responsible: Susan McSherry

Page 2 of 2

bar and again provide the opportunity for an exclusion. Thus, a company that plans its system to accept the risk of significant outage events on a 1-in-5 year basis would be deemed to have as reliable a system as the utility that has constructed its system on a 1-in-20 year basis.

(b) Electric distribution companies have a variety of incentives outside of the SQ evaluation process to address outages in a timely fashion. The most important incentive to the utility is the need to provide a satisfactory level of service to customers. Utilities also have important obligations to employees and the communities in which they serve. In fact, the substantial progress achieved by NSTAR Electric over the past few years on its reliability statistics has been a direct impact of the Company's commitment to customers rather than the "incentives" inherent in the Department's SQ plan.

NSTAR Electric

Department of Telecommunications and Energy

D.T.E. 04-116

Information Request: DTE-NSTAR 1-5

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 1

<u>Information Request DTE-NSTAR 1-5</u>

Refer to NSTAR's Reply Comments at 30-33. The Company maintains that the IEEE Standard 1366-2003 may allow exclusion of events that result from the utility's own choices regarding system design standards and their willingness to accept a corresponding level of risk. Please explain whether or not the design standards, if driven by the service quality evaluation process, would ultimately produce an outage pattern that would not meet the 2.5 beta criterion to be excluded as MED.

Response

The design standards to which the Company is referring are not part of the Department's "service-quality evaluation process" and it is unclear to the Company what is meant by "would ultimately produce an outage pattern that would not meet the 2.5 beta criterion." It is the Company's understanding that the 2.5 beta methodology is a mathematical calculation that establishes a threshold for "excludable" outages. Because the mathematical formula is updated each year with new data, the threshold of what is excludable changes every year. Over time, outages will be excludable in one year or another under the IEEE standard depending on the pattern of outages that has occurred over the past few years. Major outages in a performance year will generally be excludable for calculating SAIDI in that year. The inclusion of such major outages in the rolling year history for subsequent threshold calculations will have little impact on that threshold level because of the large number of outage days included in the calculation. Thus, design criteria that lead to more frequent major outages could result in relative lower calculated SAIDI levels than more conservative design criteria."

Information Request: DTE-NSTAR 1-6

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 1

<u>Information Request DTE-NSTAR 1-6</u>

Refer to NSTAR's Reply Comments at 32. The Company maintains that the Department's SQ Program is designed to distinguish between the events that are outside of management control and the events that are within management control. Please explain whether, and if so, how, the existing criterion of "the 15 percent or more of the customers affected" meets this distinction requirement.

Response

Please see the Company's response to DTE-NSTAR-1-1.

NSTAR Electric

Department of Telecommunications and Energy

D.T.E. 04-116

Information Request: DTE-NSTAR 1-7

June 13, 2005

Person Responsible: Susan McSherry

Page 1 of 1

Information Request DTE-NSTAR 1-7

Refer to NSTAR's Initial Comments at 32-33. Please explain what "new, manual, or automated processes" would be required to implement automatic payment of the customer service guarantee.

Response

For NSTAR to begin automatic crediting of customers for the two customer service guarantees available under the Department's SQ plan, the Company would need to alter its computer systems and management processes as follows:

Planned Outage Notifications: NSTAR notifies customers in advance of a planned outage after consultation with customer and electric-system records and databases to determine the set of affected customers. When a customer contacts the Company to report lack of notice of a planned outage, NSTAR would implement a process change whereby the Customer Service Representative adds the customer's information to an existing Customer Service Guarantee (CSG) database, which is used as input to the automated billing process. The automated billing process interfaces with the CSG database to identify any customers due the \$25 credit. On the day when the customer's billing cycle occurs, the customers on the CSG database will have credits applied to their electric bill. If NSTAR is notified that a customer was not informed of a planned outage, and that customer lives in a multi-dwelling premise, a more extensive research process would then need to occur to identify any other customers in that premise that may not also have received notification. If any additional customers are identified, their customer information would also be added to the CSG database in advance of their next billing cycle.

Missed Service Appointments: NSTAR makes every attempt to notify customers in advance of a missed service appointments. However, in the event of a missed appointment, NSTAR would implement the following process. At the end of the business month as NSTAR analyzes service appointment records and determines specific appointments that were missed, NSTAR personnel would include the customer's information on the CSG database, which interfaces with the nightly automated billing cycle. As the customer's billing cycle is processed, the customer credit for a missed appointment would be credited to the customer's next energy bill.